



ALTERNATIVE PRESENTATION

INTRODUCTION

In the context of the CALFED Bay-Delta Program, an “alternative” is a collection of actions or action categories assembled to provide a comprehensive solution to Bay-Delta problems relating to ecosystem health, water quality, water supply, and system vulnerability.

The 20 draft alternative share a set of common “core actions,” such as basic water conservation and levee upgrades, which are described below . Beyond the core actions, every alternative is different, both in terms of the actions proposed and in terms of the level at which those actions are implemented. Broadly speaking, the alternatives range from those that change the operation of the existing Bay-Delta system to those that restructure the system itself. Alternative 4, for example, emphasizes upgrading levees and restoring habitat in the existing system, leading to fewer regulatory restrictions on water diverted from existing diversion points. In contrast, Alternative 15 proposes constructing new diversion points and a new conveyance facility west of the Delta. However, none of the alternatives excludes either reoperation or restructuring. Alternative 20, for example, emphasizes reoperation but also calls for construction of a new storage facility.

To help workshop participants discuss the wide range of alternatives, the alternatives will be divided into three categories for presentation at the workshop. The first category includes eleven alternatives that emphasize system reoperation. The second category contains six alternatives whose emphasis is a balance between reoperation and restructuring. Finally, the third category includes three alternatives that emphasize restructuring.

CORE ACTIONS

Participants in Workshop 4 recommended that the Program identify actions that would be common to all alternatives. As a result, the Program Team developed a set of core actions to be included in each alternative. The core actions were taken from the list of actions and action categories developed in Workshop 3. Core actions are differentiated from other actions in the alternatives by their level of implementation and the following defining characteristics.

A core action:

- enjoys broad acceptance among stakeholders at core-level implementation
- provides a benefit to the entire Bay-Delta system
- is cost-effective
- meets one or more Program objectives
- provides some progress toward a solution but is not a satisfactory solution by itself

A core action should not:

- preclude or conflict with other actions
- increase conflicts between beneficial uses or stakeholders
- be a major program activity or major facility structure
- create significant adverse, site-specific impacts or redistribute costs (such as by infringing on existing land uses)

Because core actions are common to all alternatives, they are not described in each alternative presentation. A summary of core actions appears following a tab after this section. Full descriptions of the core actions are presented in the Appendix.

LIMITATIONS OF THE ALTERNATIVES AS WRITTEN

Preliminary review of these 20 draft alternatives has demonstrated to the Program Team that there are at least two areas in which the draft alternatives need additional work.

First, the current alternative descriptions do not adequately explain the linkages between the discrete actions within the alternatives. Because Bay-Delta problems are related to one another, actions within a Bay-Delta solution can be crafted to help resolve more than one conflict. Restoration of Delta riverine habitat can, for example, be combined with increased flood protection and levee stabilization to provide multiple benefits. In the time between the mailing of this packet and the workshop, the Program Team will develop descriptions of the linkages among actions with the aim of providing the list as a handout at the workshop.

The second item requiring further attention is the benefit assessment that appears at the end of each alternative description. During the next several weeks, a team of technical experts will develop a more uniform assessment of benefits for the full range of alternatives.

ALTERNATIVES MATRIX

To help you organize the information contained in the alternative descriptions, the matrix on the following page highlights each alternative's main approaches to achieving the primary objectives. Alternatives are listed in columns. The rows catalog the general approaches to resolving problems in the Bay-Delta. These approaches are grouped under the four primary objective areas: Water Supply, Water Quality, Ecosystem Quality, and System Vulnerability.

A check mark at the intersection of an alternative and a specific approach indicates an emphasis of that alternative. The combination of check marks distinguishes one alternative from another.

The matrix allows you to scan for draft alternatives containing actions or combined actions of high interest. It also enables you to compare draft alternatives quickly and easily at a general level, in order to differentiate them.

The 20 draft alternatives represent a continuum of solutions for addressing the Bay-Delta problems. They have been grouped under three category headings here for ease of comparison. The categories are based on the characteristic approach the alternatives take to addressing problems in the Bay-Delta. The first and largest group includes alternatives that emphasize using the existing system and modifying its operation. In some alternatives, storage is added. The second group emphasizes a mix of system reoperation and new facilities. Finally, the third group includes solutions that emphasize new facilities.

Major Approaches and Emphasis of Each Alternative

	Draft Alternatives																			
	Emphasis on System Reoperation and Continued Reliance on Existing Facilities									Emphasis on Mix of Reoperation and New Facilities								Emphasis on New Facilities		
Approaches	1	2	4	5	6	7	9	17	19	3	10	11	12	13	14	18	20	8	15	16
Water Supply																				
Reduce Demand	✓	✓				✓	✓	✓	✓		✓				✓	✓	✓			
Channel Capacity Improvements							✓					✓	✓				✓			
Small Isolated Conveyance										✓	✓		✓	✓	✓					
Large Isolated Conveyance																		✓	✓	✓
Upstream Surface Storage											✓				✓		✓		✓	
In-Delta Surface Storage					✓					✓	✓						✓	✓		
Downstream Surface Storage							✓				✓					✓	✓			✓
Conjunctive Use/Groundwater Banking	✓	✓				✓	✓	✓	✓		✓			✓	✓	✓	✓		✓	
Water Transfers	✓	✓				✓	✓	✓	✓		✓						✓			✓
Water Quality																				
Basic Pollutant Source Control	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Extensive Pollutant Source Control				✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Increase Flows for Water Quality									✓								✓	✓		✓
Ecosystem Quality																				
Bay & Delta Habitat Restoration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
San Joaquin River Improvements				✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Upper Sacramento Restoration					✓										✓				✓	✓
Obtain Water for Environment				✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Store Water for Environment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Relocate Export Diversion Point										✓	✓	✓	✓	✓	✓			✓	✓	✓
Screen Diversions	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
System Vulnerability																				
Basic Levee Improvements	✓	✓	✓			✓		✓	✓											
Moderate Levee Improvements				✓			✓			✓	✓	✓	✓	✓	✓	✓	✓		✓	
Extensive Levee Improvements					✓													✓		✓

ALTERNATIVE DESCRIPTION FORMAT

The multi-page presentation of each draft alternative provides the most thorough presentation of that alternative's approach and particular actions. Each draft alternative is presented in the same format and to approximately the same level of detail. The presentation includes a summary page, a map, and a detailed description. The following template illustrates the format of the detailed description. Two general location maps of the Bay-Delta and California Water systems are included on the following pages.

NUMBER

The numbers are from 1 to 20 and have no significance other than providing a reference system.

TITLE

The title provides a useful shorthand name, but it does not serve as a complete description of the alternative.

OVERVIEW

These paragraphs describe the vision or theme of the draft alternative, highlighting the alternative's approach, major actions, and benefits.

ACTION HEADINGS AND DESCRIPTIONS

The actions are organized under three categories:

Physical and Structural Features
Operational and Management Features
Institutional and Policy Features

Actions and associated benefits are presented in table formats as illustrated below. Considerations introduce points, options, and possible decisions related to implementation.

WATER TRANSPORT

Activities	Benefits
•	•
Considerations	
•	

PRELIMINARY ASSESSMENT

This discusses the alternative's potential benefits and constraints.